air rushes in, either by the nostrils, the nose, the mouth, or by artificial apertures, as for instance in laryngotomy. What happened in the latter case happened to our patient when he was wounded; the inspiration was increased by the shock following the sensation of the cold steel, and its shock on the sternum; the air thus strongly drawn on the coats of the chest, reached by the channel made by the foil; and, unable to proceed farther, fixed in the cellular tissue of the wound, thus producing the emphysema.

This patient, therefore, offered peculiarities worthy of remark, as his wounds made with the same foil were not of the same shape, and that, notwithstanding the serious symptoms, none of the wounds were deep.

The patient was bled, and cold bandages kept on the chest for six days; the wounds healed rapidly, and, on the fourteenth day, he left the hospital, and only felt oppression and pain above the fourth wound.—*Continental & Brit. Med. Rev.* Sept. 1837.

MEDICAL STATISTICS.

69. *Statistics of Club-foot.*—M. Martin has observed 61 cases of club-foot. Of these, 26 were double, and 35 single; of these last, in 18 the right foot was deformed, in 17 the left foot. Forty-five of the cases were in boys, and 16 in girls. *Gaz. Méd. de Paris*, June 9, 1838.

70. *Contribution to Statistics of Hernia among the Recruits for the British and Conscripts for the French Army.*—This is the title of an interesting paper by Henry Marshall, Deputy Inspector-general of Army Hospitals, published in the *Edinburgh Medical and Surgical Journal*, for July last. "The instructions issued by the Army Medical Department, for the guidance of medical officers in the duty of examining recruits, directs," says Mr. Marshall, "that no recruit is to be approved who labours under 'hernia or a tendency to that disability.' The method usually employed in the examination of recruits to discover whether they are affected with hernia, is to direct each man under inspection to produce a violent action of the abdominal muscles by coughing. During this operation the surgeon places his finger over the ring of the external oblique muscles, first on one side and subsequently on the other. Should any doubt arise during this trial, that a man may be affected with rupture, he is directed to jump as high as he can, by which means a protrusion of the gut is occasioned in cases where this disability exists. Little dependence is usually placed upon the allegation of a recruit, in regard to his previous liability to a disability, as it is not an uncommon circumstance for a man to regret having enlisted, and, with the view of being rejected by a medical officer, to falsely allege that he is occasionally affected with rupture, or some other disqualifying infirmity."

Mr. Marshall gives a table showing the number of recruits for the army examined at the depot of the centre recruiting district, (Dublin,) from the 25th of September, 1804, to the 15th of April, 1831, together with the number of recruits rejected, causes of disqualification, and ratio found unfit by each class of disabilities. From this table it appears that the number of recruits examined during the period specified was 42,740, of which number 10,279 were rejected as unfit, or 240 per 1000; and that of those rejected, 920 were disqualified by hernia, being 215 per 1000 examined, or about one in 50 of those examined, or one in every 11 found unfit for service.

The following table, given by Mr. Marshall, shows the number of recruits examined at the centre recruiting district, (Dublin,) from the year 1804 to the year 1827 inclusive, together with the number rejected in consequence of hernia, and the ratio of rejections on that account per 1000 examined.

Years.	Recruits Examined.	Unfit in consequence of hernia.		Rejected. Ratio per 1000 Examined.
1804	486	6		12.3
1805	1501	35		23.3
1806	1781	34		19.
1807	1776	32		18.
1808	1114	18		16.1
1809	1423	16		11.1
1810	1523	20		13.1
1811	1793	46		25.6
1812	3220	71		22.
1813	2984	61		24.
1814	1535	27		17.5
1815	3113	74		21.6
1816	2740	54		19.7
1817	1426	38		26.6
1818	1801	69		38.6
1819	2783	40		14.3
1820	1886	25		13.3
1821	1986	37		18.5
1822	3233	96		29.6
1823	3100	88		28.3
1824	1236	33		26.6
1825	6229	Inguinal, 32		
		Ventral, 44		
		Umbilical, 6	163	24.5
		Laxity of one or both rings, 81		
1826	4018	Inguinal, 14		
		Ventral, 3		
		Umbilical, 1	18	11.1
		Laxity of one or both rings, 30		
1827	2583	Inguinal, 13		
		Ventral, 3	38	14.6
		Laxity of one or both rings, 22		
Total,	55,575	1169		21.04

This tablo shows, that, during a period of about 24 years, 55,575 recruits were examined, and that 1169 were found unfit for military service in consequence of hernia, being 21.04 per 1000, or about one in 48. The relative annual ratio of rejections ranges from 11, in 1809, to 38 per 1000 in 1818.

"It will be observed that 44 recruits were found unfit in the year 1825, on account of ventral hernia—a term which is usually applied to hernial tumours that appear at any part of the belly, excepting at the natural apertures, in the parietes of the abdomen. These tumours varied in size from that of a pea to about half a hazlenut, and never appeared except during a violent action of the abdominal muscles. In the same year six recruits were rejected in consequence of slight protrusion at the navel, under the denomination of umbilical hernia. This blemish is very rare among natives of the united kingdom; and, when it does occor, it is in general so slight as to be scarcely observablo even during violent action of the abdominal muscles. A large proportion of the natives of Central Africa have, in a greater or less degree, rupture at tho navel, which does not seem to disable them in tho least for hard labour. It appears probable that the preternatural enlargement of the aperture at the umbilicus is congenital. Winterbottom informs us that African children are very subject to protrusion of the oavel. Atkins imagines the protrusion to be the "effect of bad midwifery, or straining in their infancy to work." But from what I have seen of the offspring

of negroes, I believe that neither good midwifery nor a life of ease will prevent a protrusion at the umbilicus in children of the aboriginal inhabitants of tropical Africa.

"Although I have, while officiating as staff-surgeon, rejected a number of recruits on account of small ventral hernia, and also in consequence of slight protrusion at the umbilicus, in compliance with the regulations, I do not recollect having seen an instance of either class of blemishes who was on that account unfit for his majesty's service. The instructions issued on this subject directed that no recruit was to be approved who laboured under "hernia (of whatever kind.) or preternatural enlargement of the ring;" and, for many reasons, it would have been highly inexpedient for a staff-surgeon to be so far influenced by his own discretion or opinion as to commit a breach of the law. It will be recollected that the approval of a recruit by a staff-surgeon is not final, and consequently he must be in some measure guided in the execution of his duty, not by his own knowledge, experience, and discretion, but by his appreciation of the judgment and experience of the medical officer whose duty it is to decide finally upon the fitness or unfitness of a recruit for a regiment."

The following table exhibits a summary of Mr. Marshall's researches:

Recruits examined at	No. examin.	Total reject.	Ratio per 1000 reject.	No. rejected by hernia.	Millesimal ratio of rejections in consequence of hernia.		
Dublin depot,	42,740	10,279	240	920	21.5=1 in 11 of		No. reject.
Glasgow and Edinburgh,	9,528	2,375	248	69	7,1	1 in 34	do.
German Legion,	40,462	0	0	365	9		
France, mean three yrs.	126669	46,669	368	3,948	31.2	1 in 11.8	do.
Department of Seine,	26,083	11,148	427	834	31.9	1 in 13.3	do.

"The above summary presents several very remarkable results, one of which is, that the ratio of rejections on account of hernia in Dublin is three times that of Glasgow and Edinburgh. Hernia appears to be 50 per cent. higher among conscripts in France than among recruits examined in Dublin. The uniformity of the ratio of rejections for hernia among conscripts in France for three years, (31.2), and in the department of the Seine for a period of eleven years, (31.9), is sufficiently remarkable. The much higher ratio of rejections for disabilities in general among the conscripts in France, than among the recruits examined for the periods specified in Dublin and Scotland, is also calculated to excite attention."

ANIMAL CHEMISTRY.

71. *Urea in Dropsical Fluids*—R. Marchand has detected urea in the fluid contained in the peritoneal cavity in three cases of ascites. In the first he found 0.42, in the second 0.68, in the third 0.50 per cent.; and it appears probable that there was much more, because the quantity of albumen in the same fluid rendered it difficult to prevent the urea being entangled in the coagulated masses produced by the agents used in extracting it. In all the cases very little urine was secreted; and in two of them there was the disease of the kidney described by Dr. Bright. He mentions, also, that two cases are given by Nysten, (*Journal de Chimie Médicale*, 1837,) in which he found urea and uric acid, phos-